

# 2SC1473, 2SC1473A

### Silicon NPN triple diffusion planar type

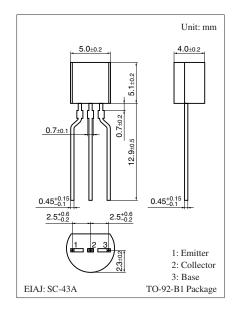
For general amplification 2SC1473 complementary to 2SA1018 2SC1473A complementary to 2SA1767

#### ■ Features

- ullet High collector-emitter voltage (Base open)  $V_{CEO}$
- High transition frequency f<sub>T</sub>

#### ■ Absolute Maximum Ratings $T_a = 25$ °C

| Parameter                   | Symbol    | Rating           | Unit |   |
|-----------------------------|-----------|------------------|------|---|
| Collector-base voltage      | 2SC1473   | V <sub>CBO</sub> | 250  | V |
| (Emitter open)              | 2SC1473A  |                  | 300  |   |
| Collector-emitter voltage   | 2SC1473   | V <sub>CEO</sub> | 200  | V |
| (Base open)                 | 2SC1473A  |                  | 300  |   |
| Emitter-base voltage (Coll  | $V_{EBO}$ | 7                | V    |   |
| Collector current           | $I_C$     | 70               | mA   |   |
| Peak collector current      | $I_{CP}$  | 100              | mA   |   |
| Collector power dissipation | $P_{C}$   | 750              | mW   |   |
| Junction temperature        | $T_j$     | 150              | °C   |   |
| Storage temperature         | $T_{stg}$ | -55 to +150      | °C   |   |



### ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

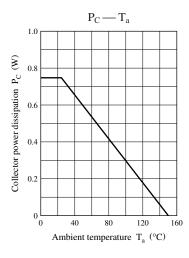
| Parameter                    |            | Symbol               | Conditions   | Min | Тур | Max | Unit |
|------------------------------|------------|----------------------|--|-----|-----|-----|------|
| Collector-emitter voltage    | 2SA1473    | V <sub>CEO</sub>     | $I_C = 100 \ \mu A, I_B = 0$                                       | 200 |     |     | V    |
| (Base open)                  | 2SA1473A   |                      |  | 300 |     |     |      |
| Emitter-base voltage (Colle  | ctor open) | V <sub>EBO</sub>     | $I_E = 1 \mu A, I_C = 0$   | 7   |     |     | V    |
| Collector-emitter cutoff     | 2SA1473    | $I_{CEO}$            | $V_{CE} = 120 \text{ V}, T_a = 60^{\circ}\text{C}, I_B = 0$        |     |     | 1   | μΑ   |
| current (Base open)          | 2SA1473A   |                      | $V_{CE} = 120 \text{ V}, I_{B} = 0$                                |     |     | 1   |      |
| Forward current transfer rat | io *       | $h_{FE}$             | $V_{CE} = 10 \text{ V}, I_{C} = 5 \text{ mA}$                      | 60  |     | 220 | _    |
| Collector-emitter saturation | voltage    | V <sub>CE(sat)</sub> | $I_C = 50 \text{ mA}, I_B = 5 \text{ mA}$                          |     |     | 1.2 | V    |
| Transition frequency         |            | $f_T$                | $V_{CB} = 10 \text{ V}, I_E = -10 \text{ mA}, f = 200 \text{ MHz}$ | 50  | 80  |     | MHz  |
| Collector output capacitanc  | e          | Cob                  | $V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$                |     |     | 10  | pF   |
| (Common base, input open     | circuited) |                      |  |     |     |     |      |

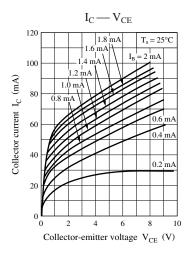
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

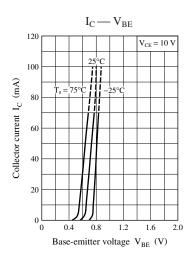
#### 2. \*: Rank classification

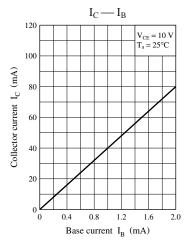
| Rank     | Q         | R          |  |  |
|----------|-----------|------------|--|--|
| $h_{FE}$ | 60 to 150 | 100 to 220 |  |  |

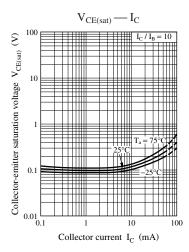
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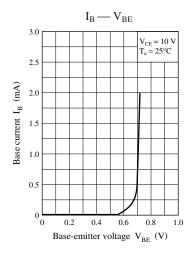


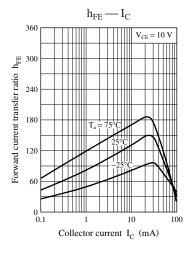


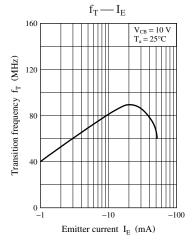


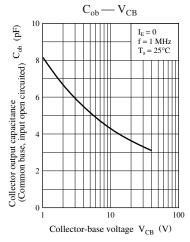






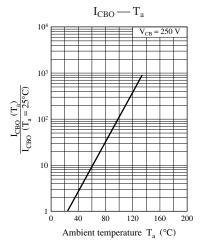


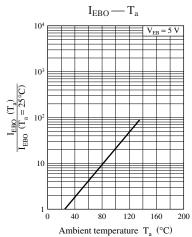


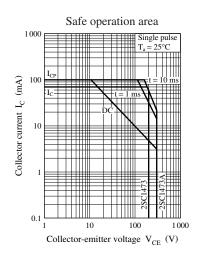


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